

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-15 (Canceled).

Claim 16 (Previously Presented): A turbine blade cascade structure comprising:  
a plurality of blades having respective blade bodies and provided in series on a wall surface in a circumferential direction, the wall surface connecting the blade bodies so that connected portions of the wall surface and blade bodies form corner portions, respectively; and  
a cover portion disposed only at a portion near a front edge portion of each of the blade bodies corresponding to a flow of a working fluid in the corner portions formed to the connected portion, extending to an upstream side of the flow of the working fluid and formed as a protruded portion having a concave curved surface toward a height direction of the front edge portion of the blade body from a base portion on the upstream side of the flow of the working fluid.

Claim 17 (Currently Amended): The turbine blade cascade structure according to claim 29 [[16]], wherein at least one of a root side and a tip side of the blade body is provided with the cover portion.

Claim 18 (Previously Presented): The turbine blade cascade structure according to claim 16, wherein the protruded portion having the concave curved surface is formed to establish relationships of  $L0 = (2 - 5)H0$  and  $H0 = (0.5 - 2.0)T$ , in which L0 represents a distance from the base portion to the front edge portion of the blade body, H0 represents a

distance from the wall surface to the height direction of the front edge portion, and T represents a thickness of a boundary layer of the working fluid in a steady operation.

Claim 19 (Currently Amended): The turbine blade cascade structure according to claim 29 [[16]], wherein the protruded portion having the concave curved surface is formed into a fan-like configuration that extends to a front side and a back side of the blade body with respect to a stagnation point in a steady operation of the working fluid that collides against the front edge portion of the blade body.

Claim 20 (Previously Presented): The turbine blade cascade structure according to claim 19, wherein an angle  $\theta$  of a sector of the protruded portion having the fan-like configuration with respect to the stagnation point in the steady operation of the working fluid that meets against the front edge portion of the blade body is set to be in a range between  $\pm 15^\circ$  and  $\pm 60^\circ$ .

Claim 21 (Currently Amended): The turbine blade cascade structure according to claim 29 [[16]], wherein the protruded portion is raised from the upstream side to the height direction of the front edge portion of the blade body, the protruded portion formed by selecting one of a connecting piece that has been preliminarily made as an independent member, a machined piece together with the blade body, and a welded deposit.

Claim 22 (Currently Amended): The turbine blade cascade structure according to claim 29 [[16]], wherein the blade bodies are supported by at least one of the wall surface at a root side of the blade bodies and the wall surface at a tip side of the blade bodies.

Claim 23 (Currently Amended): The turbine blade cascade according to claim 29 [[16]], wherein the blade bodies are connected to the wall surface at the root side, and the wall surface on the root side is formed as a straight downward inclined surface from the front edge portion of the blade bodies toward the upstream side as viewed from the front side of the blade bodies.

Claim 24 (Previously Presented): The turbine blade cascade according to claim 22, wherein the blade bodies are connected to the wall surface at the root side, and the wall surface on the root side is formed as a downward inclined curved surface from an intermediate portion of the blade bodies toward the upstream side of the front edge portion as viewed from the front side of the blade bodies.

Claim 25 (Withdrawn/Currently Amended): The turbine blade cascade according to claim 29 [[16]], wherein the blade bodies are connected to the wall surface at a tip side thereof, and the wall surface on the tip side is formed as an upward inclined surface and an upward inclined surface from the front edge portion of the blade bodies as viewed from the front side of the blade bodies.

Claim 26 (Currently Amended): The turbine blade cascade structure according to claim 29 [[16]], wherein the blade bodies are connected to the wall surface at a tip side of the wall surface, and the wall surface on the tip side is formed as an upward inclined curved surface curved from an intermediate portion of the blade bodies toward the front edge portion of the upstream side.

Claim 27 (Currently Amended): The turbine blade cascade structure according to claim 29 [[16]], wherein the wall surface for connecting the blade bodies is flat.

Claim 28 (Previously Presented): The turbine blade cascade structure according to claim 16, wherein the protruded portion forming the cover portion is formed from a single concave curved surface.

Claim 29 (New): A turbine blade cascade structure comprising:

a plurality of blades having respective blade bodies and provided in series on a wall surface in a circumferential direction, the wall surface connecting the blade bodies so that connected portions of the wall surface and blade bodies form corner portions, respectively; and

a cover portion disposed only at a portion near a front edge portion of each of the blade bodies corresponding to a flow of a working fluid in the corner portions formed to the connected portion, extending to an upstream side of the flow of the working fluid and formed as a protruded portion having a concave curved surface toward a height direction of the front edge portion of the blade body from a base portion on the upstream side of the flow of the working fluid,

wherein the protruded portion forming the cover portion is formed from a single concave curved surface.

Claim 30 (New): A turbine blade cascade structure comprising:

a plurality of blades having respective blade bodies and provided in series on a wall surface in a circumferential direction, the wall surface connecting the blade bodies so that

connected portions of the wall surface and blade bodies form corner portions, respectively;  
and

a cover portion disposed only at a portion near a front edge portion of each of the blade bodies corresponding to a flow of a working fluid in the corner portions formed to the connected portion, extending to an upstream side of the flow of the working fluid and formed as a protruded portion having a concave curved surface toward a height direction of the front edge portion of the blade body from a base portion on the upstream side of the flow of the working fluid,

wherein the protruded portion having the concave curved surface is formed to establish relationships of  $L0 = (2 - 5)H0$  and  $H0 = (0.5 - 2.0)T$ , in which  $L0$  represents a distance from the base portion to the front edge portion of the blade body,  $H0$  represents a distance from the wall surface to the height direction of the front edge portion, and  $T$  represents a thickness of a boundary layer of the working fluid in a steady operation.